

Title : Retail Stockouts & Overstocking

1.Problem Statement:

A retail store chain is facing frequent stockouts (popular products going out of stock) and at the same time overstocking (less-demand products filling up storage). This leads to lost sales and high inventory costs.

2.Stakeholders:

Store Managers → Need stock visibility, avoid stockouts.

Supply Chain Team → Manage timely reorders, reduce overstock.

Customers → Want products available at right time.

Senior Management → Improve profit & reduce waste.

IT/Data Team → Build and maintain dashboard.

3.Requirement Gathering Approach:

- Interview with store managers : to understand daily stocks.
- Data Analysis : analyse historical data to find stock patterns.
- Feedback : Collect feedback from customers about product availability and satisfaction.
- Workshops : Conduct sessions with senior management and IT team to align business goals and dashboard requirements.

4.Proposed Solutions:

- Demand Forecasting → Use past sales data to predict demand.
- Automated Inventory Alerts → Trigger reorder when stock hits threshold.
- Supplier Collaboration → Faster restocking cycles for high-demand items.
- Promotions/Discounts → Move less-demand products faster.

- Dashboard → Monitor stock levels in real time.

5.Outcome / Benefits:

- Reduced stockouts → more customer satisfaction.
- Lower holding costs → higher profitability.
- Better decision-making through dashboards.

6.Tools:

Business Requirement Document (BRD):

Background / Problem Statement:

The retail store chain is facing frequent stockouts of popular products and overstocking of low-demand products, resulting in lost sales and high storage costs. The project aims to build an inventory management dashboard that provides insights into product demand, sales patterns, and reorder alerts. This will ensure optimized stock levels and better customer satisfaction.

Business Objectives:

- Reduce stockouts of popular products by **30% within 3 months**.
- Reduce overstocking and storage costs by **20%**.
- Improve customer satisfaction and sales.
- Provide data-driven insights to store managers for better decisions.

Scope:

- In Scope : Sales & Inventory Data Dashboard, Automatic reorder alert system, Product demand categorization (High/Low), Store-wise performance tracking.
- Out of Scope: Warehouse logistics restructuring, Supplier contract negotiations.

Stakeholders:

- Customers
- Store Managers
- Supply Chain Team
- Senior Management
- IT Team

Business Requirements (High-Level):

- Dashboard should display **Top Selling Products** and **Low Selling Products**.
- System should give **Reorder Alerts** for popular products.
- Show **Inventory Turnover Rate** (how quickly products sell).
- Identify **slow-moving products** that increase storage costs.
- Show sales trends by **time, location, and customer demographics**.

Functional Requirement Document (FRD):

Functional Overview:

The system will automate and streamline the loan approval process by adding staff capacity, enabling online authentication, eligibility checks, and real-time status tracking.

Functional Requirements:

Dashboard Features:

- KPI Cards: Total Sales, Stockouts %, Overstock %.
- Charts: Top 10 Products by Demand, Slow Moving Products.
- Filter: Date, Store Location, Product Category.

- Alerts: Highlight products with stock < threshold.
- **User Roles:**
 - Store Manager → View & act on dashboard.
 - Senior Management → See consolidated company-wide reports.

Non-Functional Requirements:

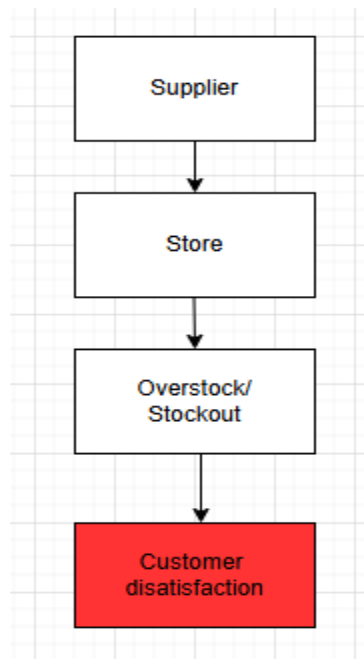
- Dashboard should be **real-time** (data refresh every few hours).
- Easy to use for **non-technical managers**.
- Should work across **multiple store locations**.
- Secure access for stakeholders (role-based login).

Success Metrics:

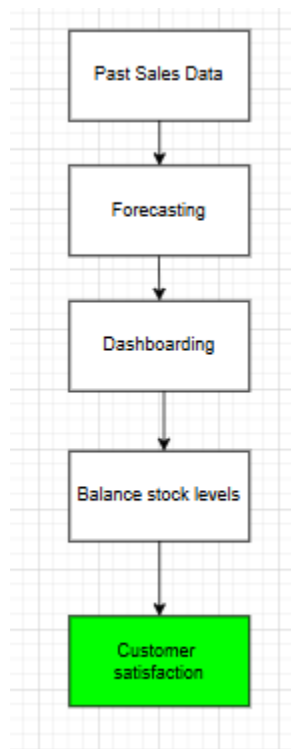
- Reduced Overstocking
- Increased Sales & Revenue
- Higher Customer Satisfaction
- Faster Replenishment Time

Process Flow:

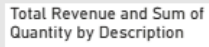
As-is:



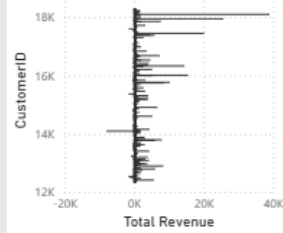
To-be:



Dashboard:



21.25✓
Goal: 9 (+136.11%)



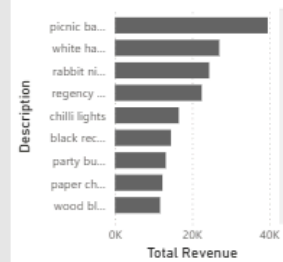
Year

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☐ 2010
☐ 2011

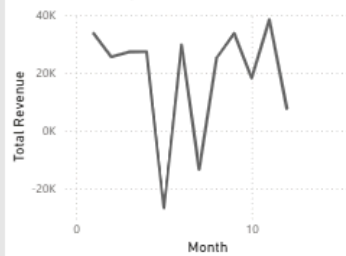
Country

- ☐ Australia
- ☐ Austria
- ☐ Bahrain
- ☐ Belgium

Total Revenue by Description



Total Revenue by Month

[illegible]